		NTSB ID: MIA97FA057		Aircraft Registration Number: N802TH	
		Occurrence Date: 01/02/1997		Most Critical Injury: Fatal	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place EDENTON	State NC	Zip Code 27932	Local Time 1835	Time Zone EST	
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility: 1		Direction From Airport: 190	
Aircraft Information Summary					
Aircraft Manufacturer Cessna		Model/Series 208B		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:					
<p>HISTORY OF FLIGHT</p> <p>On January 2, 1997, about 1835 eastern standard time, a Cessna 208B, N802TH, operated by Tar Heel Aviation Inc., operating as a Title 14 CFR Part 91, positioning flight, crashed while on approach for landing near Edenton, North Carolina. Instrument meteorological conditions prevailed and no flight plan was filed. The airplane was destroyed. The commercial pilot, and an airline transport-rated, jump seat passenger were fatally injured. The flight departed Manteo, North Carolina, about 1815 en route to Edenton to pick up cargo. It was then scheduled to continue on to Raleigh, North Carolina, under a contract with United Parcel Services (UPS).</p> <p>At 1724:44, the pilot of N802TH telephoned the Raleigh Automated Flight Service Station (AFSS) and identified himself as Tarheel 1279 (THC1279). The pilot told the specialist he was "trying to figure out what was going on with this cloud stuff and are you coming down out there yet...." The specialist said, "we have been down all day...were still a little bit IFR [instrument flight rules]...are you looking for a standard briefing...." The pilot answered, "no sir."</p> <p>The weather at Edenton was not available, so the pilot was provided the Elizabeth City, North Carolina, weather: "...indefinite ceiling 300, [visibility] 2 miles, in mist, [temperature] 8 degrees C [46F], dew point, 7 degrees C [45F], winds 260 degrees at 5 [knots], altimeter 29.89 inHg.</p> <p>The Air Operations Controller for UPS at the Manteo Airport (MQI), wrote in his statement to the sheriff, that the pilot of N802TH usually departed from MQI about 1915, en route to Edenton. The UPS controller stated; "...[the pilot] told me the fog was forecasted to move in and UPS had told him to make sure to make it to Edenton." On January 2, 1997, the flight departed about 1 hour earlier, because the business manager for UPS had called between 1500 and 1600, and told the pilot of N802TH to "leave earlier," because UPS was concerned that the weather at Edenton was deteriorating and if the airplane was not there earlier they might not get into the airport.</p> <p>According to the Air Operations Controller for UPS at Manteo, the pilot had called on the UNICOM frequency, after departure, and said, "...that he couldn't make it back to Manteo or Elizabeth City, because the fog had already moved in." About 20 minutes later, the UPS controller at Manteo, called the pilot of N802TH, on the UNICOM and asked him "did he think he could get into Pitt Greenville?" The pilot answered, "...the ceiling in Greenville was 700 feet and getting worse all the time and he didn't know if he could get in there or not."</p> <p>The pilot of N802TH then asked the UPS controller at Manteo to call UPS in Raleigh, tell them the situation, and ask what they wanted the pilot of N802TH to do. UPS in Raleigh advised UPS in Manteo that they would call back with further instructions, because they did not know what to do. The information was forwarded to the pilot of N802TH, and it was at this time the pilot told</p>					
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Occurrence Type: Accident

Narrative (Continued)

the UPS controller at Manteo that he was "getting ready to try to go into Edenton" and that he would soon be "too low" to talk to Manteo. The UPS controller at Manteo then told the pilot "if you miss at Edenton, climb up and call me for directions."

About 1835, there was a power failure and the lights around the Edenton Airport went out. At 1845, the UPS controller at Manteo, tried to call the pilot of N802TH on the UNICOM, but he did not get any answer. There was no further radio communication with the airplane.

According to the UPS business manager's statement, between 1500 and 1600 he called Raleigh "to suggest we move the plane [N802TH] from Manteo to Edenton. There had been a lot of fog weather." He said about 1730, he called Manteo to see if the N802TH had moved to Edenton, and that "no one knew." A little after 1800, he was on his way to someone's house and stopped at the Edenton Airport to see if the plane was there and he said it "was not." In addition, he said, "I could not see from the gate to the back of the building where the plane was parked." He arrived at his destination about 1830, and about 1850 the lights went out. He called the UPS center and found out that the lights were out all over the area. He told the people at the UPS center, "we would have to carry our air [cargo] somewhere because I didn't think the airplane could land out there [Edenton]." He said it was not until about 2020 that the sheriff told him that it was possible that UPS's plane had crashed.

After the power failure, the sheriff's office received calls from some residents, that lived south of the airport, and had heard a low flying plane go over their homes just before the lights went out. A deputy was dispatched to Cape Colony area, at a point where the power lines cross the Albemarle Sound to check on a possible airplane crash. According to the deputy that was first on the scene, "...I found one electrical wire broken. Using a pair of binoculars and a spotlight [I] looked in the area of the first electrical tower. It was extremely foggy and I would estimate visibility [was] at a maxim of 300 yards...as the fog lifted briefly, I could barely see a white object in the water near the base of the tower. I could not confirm at the time what the object was...[until another deputy] arrived with night vision [and] we were able to confirm that it was a downed aircraft."

The accident occurred during the hours of darkness approximately 36 degrees, 01 minutes north, and 076 degrees, 34 minutes west.

PERSONNEL INFORMATION

Information on the pilot is contained in this report on page 3, under First Pilot Information. The pilot's personal logbook containing his flight hours was not found.

The pilot was hired by Tarheel Aviation May 1995, and his last check ride before the accident was November 8, 1996.

METEOROLOGICAL INFORMATION

Instrument meteorological conditions prevailed at the time of the accident. Meteorological information is contained in this report on page 3, under Weather Information. Witnesses reported that there was heavy fog at Edenton and the visibility was below 1/4 mile.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilots, on January 3, 1997, at the Medical Examiner's Office, Chapel Hill, North Carolina, by Dr. Robert Thompson and Dr. Karen Chancellor.

Toxicological tests were conducted at the Federal Aviation Administration, Research Laboratory, Oklahoma City, Oklahoma, and revealed, "...no drugs or alcohol detected..."

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Narrative (Continued)**AERODROME INFORMATION**

The published non-direction beacon (NDB) approach in effect at the time of the accident stated in the remarks: "Use Elizabeth [City] altimeter setting, when Elizabeth control tower closed, procedure not authorized...straight-in minimums not authorized at night." There was no record found to indicate that the pilot had the Elizabeth City altimeter. There was no recorded transmission between the airplane and the control tower at Elizabeth City. The hours of operation of the Elizabeth City tower on the day of the accident were from 0700 to 2200.

The published minimums for the NDB approach to runway 5 was the same for the straight-in and circling approaches. They were: 580 feet minimum descent altitude (MDA), with at least 1 mile visibility, and the height above the terrain was 561 feet. The minimum ceiling was 600 feet and 1 mile visibility.

WRECKAGE INFORMATION

The accident site was located on the approach end of runway 1 and runway 5, about 1/2 mile southwest of the airport. The airplane came to rest directly under down power lines, a broken power line support tower, in about 5 feet of water, and about 600 feet offshore. The airplane was removed from the water, the afternoon of January 3, 1997, and taken to Waff's Marine Salvage Yard, at Edenton where the airframe and engine were examined.

Wire from the power lines was found wrapped around the engine and airframe to include the tail section. Wire strike marks were observed on the nose and main landing gear tires and struts. In addition, wire strike marks were observed on the propeller blades.

Partial control continuity was established to the ailerons, because of the deformation and damage to the wings. Control continuity was established to the elevators and rudder. The left elevator and stabilizer displayed impact damage, and part of the power line cable was wrapped around the left stabilizer. The right elevator and stabilizer displayed minor impact damage. Examination of the engine revealed that it remained attached to the airframe by external lines and linkages. Power line cable was found wrapped around the engine and propeller flange for 10 complete loops. No discrepancies were found with the engine.

For reference purposes, the propeller blades were numbered from the rear, 1 thru 3 counter clockwise.

Blade No. 1: The blade airfoil was deformed slightly aft and the tip was twisted towards low pitch. The leading edge was gouged about 1/2 inch inboard of the tip and about 3 inches inboard of the tip. The gouge marks were consistent with wire that was wrapped around the propeller flange.

Blade No. 2: The airfoil of the blade was deformed about 20 degrees forward from about 1/2 span, and the tip was twisted toward low pitch. The leading edge displayed gouges at locations 3 inches, 4-1/2 inches, and 6 inches inboard of the tip. The gouge marks were consistent with wire that was wrapped around the propeller flange.

Blade No. 3: The airfoil of the blade was deformed about 90 degrees aft, and the tip was twisted towards low pitch. The trailing edge was deformed and dimpled about 5 and 9 inches inboard of the tip.

ADDITIONAL INFORMATION

According to a record of telephone conversation between the UPS, Air Operations Controller

National Transportation Safety Board

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Narrative (Continued)


at Manteo, and the FAA, dated January 5, 1997, the controller told the FAA: "...[the jump seat passenger] usually rode this airplane to RDU [Raleigh], probably once a week and then caught a flight out of RDU...this was his regular means of transportation to RDU." The passenger was a pilot for an air freight company. The UPS controller said he "has ridden with these pilots on this run before." He further said that the previous pilot that flew this trip "had been known to use his radar to paint the power lines running on an extended line from the runway, and follow these to the shoreline...then turn towards the runway." The UPS controller said he "has seen this done on at least two occasions, although never with [the accident pilot]." The controller said he "feels certain that [the pilot of N802TH] knew of and used this procedure routinely to get into Edenton when weather was low...this is [a] fairly common practice for pilots going in to Edenton. All local pilots know the powerlines are there and that they lead to the airport...both [pilots] knew the lines were there and their height...."


The broken power lines and tower were owned by Virginia Power Company. The elevation of the tower at the point where it was damaged was 128 feet above the water. The magnetic heading of the tower and power lines was 013/193 degrees. The power lines sagged about 12 to 14 feet and their height above the water was about 110 feet. The broken wires were shield or static wire and were 0.349 inches in diameter. The static wire had a tensile strength of about 280 pounds. In addition, a phase conductor wire was also broken. The phase conductor wire had a diameter of 0.721 inches and a tensile strength of 100 pounds.

The aircraft wreckage was released to Mr. Paul Waff, representing the owner's insurance company, on January 4, 1997.

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		Occurrence Type: Accident				
Landing Facility/Approach Information						
Airport Name NORTHEASTERN REGIONAL		Airport ID: EDE	Airport Elevation 20 Ft. MSL	Runway Used 0	Runway Length	Runway Width
Runway Surface Type:						
Runway Surface Condition:						
Type Instrument Approach: NONE						
VFR Approach/Landing: Full Stop						
Aircraft Information						
Aircraft Manufacturer Cessna		Model/Series 208B		Serial Number 208B-0179		
Airworthiness Certificate(s): Normal						
Landing Gear Type: Tricycle						
Homebuilt Aircraft? No		Number of Seats: 2	Certified Max Gross Wt. 8750 LBS	Number of Engines: 1		
Engine Type: Turbo Prop		Engine Manufacturer: P&W	Model/Series: PT6A-114A	Rated Power: 675 HP		
- Aircraft Inspection Information						
Type of Last Inspection AAIP		Date of Last Inspection 11/18/1996	Time Since Last Inspection 64 Hours	Airframe Total Time 3520 Hours		
- Emergency Locator Transmitter (ELT) Information						
ELT Installed? Yes		ELT Operated? No		ELT Aided in Locating Accident Site?		
Owner/Operator Information						
Registered Aircraft Owner CESSNA FINANCE CORP.		Street Address POB 308				
		City WICHITA	State KS	Zip Code 67201		
Operator of Aircraft TAR HEEL AVIATION INC.		Street Address 278 ALBERT ELLIS AIRPORT RD				
		City RICHLANDS	State NC	Zip Code 28574		
Operator Does Business As:				Operator Designator Code: FFJA		
- Type of U.S. Certificate(s) Held:						
Air Carrier Operating Certificate(s): On-demand Air Taxi						
Operating Certificate:			Operator Certificate:			
Regulation Flight Conducted Under: Part 91: General Aviation						
Type of Flight Operation Conducted: Positioning						

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First Pilot Information																																																																																						
Name			City		State	Date of Birth	Age																																																																															
On File			On File		On File	On File	35																																																																															
Sex: M	Seat Occupied: Left		Principal Profession: Civilian Pilot			Certificate Number: On File																																																																																
Certificate(s): Commercial																																																																																						
Airplane Rating(s): Multi-engine Land; Single-engine Land																																																																																						
Rotorcraft/Glider/LTA: None																																																																																						
Instrument Rating(s): Airplane																																																																																						
Instructor Rating(s): None																																																																																						
Type Rating/Endorsement for Accident/Incident Aircraft? No					Current Biennial Flight Review?																																																																																	
Medical Cert.: Class 2		Medical Cert. Status: Valid Medical--no waivers/lim.			Date of Last Medical Exam: 04/27/1996																																																																																	
<table border="1"> <thead> <tr> <th rowspan="2">- Flight Time Matrix</th> <th rowspan="2">All A/C</th> <th rowspan="2">This Make and Model</th> <th rowspan="2">Airplane Single Engine</th> <th rowspan="2">Airplane Multi-Engine</th> <th rowspan="2">Night</th> <th colspan="2">Instrument</th> <th rowspan="2">Rotorcraft</th> <th rowspan="2">Glider</th> <th rowspan="2">Lighter Than Air</th> </tr> <tr> <th>Actual</th> <th>Simulated</th> </tr> </thead> <tbody> <tr> <td>Total Time</td> <td>2980</td> <td>850</td> <td>2800</td> <td>180</td> <td>650</td> <td>1000</td> <td>50</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pilot In Command(PIC)</td> <td>2900</td> <td>850</td> <td>2750</td> <td>175</td> <td>645</td> <td>1000</td> <td>50</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Instructor</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 90 Days</td> <td>135</td> <td>120</td> <td>120</td> <td>15</td> <td>60</td> <td>50</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 30 Days</td> <td>45</td> <td>30</td> <td>30</td> <td>15</td> <td>20</td> <td>10</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 24 Hours</td> <td>3</td> <td>3</td> <td>3</td> <td></td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>								- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air	Actual	Simulated	Total Time	2980	850	2800	180	650	1000	50				Pilot In Command(PIC)	2900	850	2750	175	645	1000	50				Instructor											Last 90 Days	135	120	120	15	60	50					Last 30 Days	45	30	30	15	20	10					Last 24 Hours	3	3	3			2				
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Seatbelt Used? Yes		Shoulder Harness Used? Yes			Toxicology Performed? Yes		Second Pilot? Yes																																																																															
Flight Plan/Itinerary																																																																																						
Type of Flight Plan Filed: None																																																																																						
Departure Point		State		Airport Identifier		Departure Time		Time Zone																																																																														
MANTEO		NC		MQI		1815		EST																																																																														
Destination		State		Airport Identifier																																																																																		
Same as Accident/Incident Location				EDE																																																																																		
Type of Clearance: None																																																																																						
Type of Airspace:																																																																																						
Weather Information																																																																																						
Source of Briefing: Company; Flight Service Station																																																																																						
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Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
ECG	1845	EST	12 Ft. MSL	10 NM	360 Deg. Mag.
Sky/Lowest Cloud Condition: Clear				0 Ft. AGL	Condition of Light: Night/Dark
Lowest Ceiling: Obscured			100 Ft. AGL	Visibility: 0.5 SM	Altimeter: 29.00 "Hg
Temperature: 8 °C		Dew Point: 6 °C	Wind Direction: 220		Density Altitude: Ft.
Wind Speed: 5		Gusts:	Weather Conditions at Accident Site: Instrument Conditions		
Visibility (RVR): 0 Ft.		Visibility (RVV) 0 SM	Intensity of Precipitation: Unknown		
Restrictions to Visibility: Fog					
Type of Precipitation: None					
Accident Information					
Aircraft Damage:		Aircraft Fire:		Aircraft Explosion	
Classification:					
- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot	1				1
Second Pilot	1				1
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers					
- TOTAL ABOARD -	2				2
Other Ground	0	0	0		0
- GRAND TOTAL -	2	0	0		2

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	Occurrence Type: Accident	
Administrative Information		
Investigator-In-Charge (IIC) ALAN J. YURMAN		
Additional Persons Participating in This Accident/Incident Investigation: PHIL RANDALL WINSTON/SALEM FSDO WINSTON/SALEM, NC 27106 THOMAS A BERTHE PRATT & WITNEY ENGINES S. BURLINGTON, VT 05403 FRED LEEPER CESSNA AIRCRAFT WICHITA, KS 67215		
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